## NATIONAL CENTER FOR HEALTH STATISTICS DATA LINE



In 1988 the National Center for Health Statistics (NCHS) released data from several new pro-

grams, fielded a revised questionnaire on acquired immunodeficiency syndrome (AIDS) knowledge and attitudes, launched several major data collection initiatives, and furthered its use of automation for data collection and dissemination. NCHS also conducted research on survey questionnaire design, joined with other nations in collaborative international statistical research, and completed planning for activities involving the Health Objectives for the Nation.

## 1988 Year in Review

New data. In addition to the data from NCHS surveys that are published every year, NCHS released data from several programs in 1988, including the first national file linking births and infant deaths. This file allows analysis of infant mortality rates by characteristics of the mothers and infants. The public use data tape for the 1983 birth cohort became available in 1988, and the data tape for the 1984 birth cohort will be available in early 1989. The data tapes present opportunities for researchers to examine in detail the factors influencing infant mortality.

The first data tape from the informant questionnaire of the 1986 National Mortality Followback Survey (NMFS) became available in 1988. NMFS gathers data on the characteristics of deceased persons; a sample of death certificates identifies next-of-kin respondents.

Information collected for NMFS includes use and payment for hospitals and other care during the patient's last year of life, lifestyle factors associated with health status, and the decedents' socioeconomic level. A facility questionnaire is also sent to health facilities where the decedents received care during their last year of life.

Based on 1986 NMFS data, NCHS staff completed papers on deaths from AIDS and women who died of heart attacks. In late 1989 a combined data tape with data from both the informant and facility questionnaires is to be available. Reports are expected on

three leading causes of death, external causes of death, and AIDS.

AIDS knowledge and attitudes. One of NCHS's data collection efforts related to AIDS was the continuation of the AIDS Knowledge and Attitudes questionnaire initially fielded from August to December 1987. After revision in early 1988, the questionnaire was again fielded in May as a special topic of the National Health Interview Survey.

A special question included from May through July 1988 evaluated the distribution and usefulness of the CDC brochure "Understanding AIDS," which was sent to all households in the United States in June 1988. Sixty-three percent of adults reported having received the brochure, and about one-third of those who read the brochure believed it had provided new information or answered questions they had about AIDS.

Since August 1987, the questionnaires have revealed increased knowledge and decreased misinformation on AIDS and HIV (human immunodeficiency virus) infection. According to provisional data from July 1988, a large majority of adults thought it was definitely true that AIDS leads to death (88 percent), that there is no cure for AIDS at present (85 percent), and that the AIDS virus can be transmitted by means of sexual intercourse (81 percent), and from mother to infant (80 percent). Three percent of adults said that they belonged to one or more of the behavior groups associated with increased risk of HIV transmission. Eighteen percent of adults had had their blood tested for HIV infection.

Data collection initiatives. NCHS fielded the National Survey of Family Growth (NSFG) from January to August 1988. Last conducted in 1982, NSFG collects data on family planning practices and attitudes, differences in fertility, and related aspects of maternal and child health. The sampling frame for the 1988 NSFG was taken from the National Health Interview Survey.

New questions that appeared in the 1988 NSFG included knowledge of

AIDS and other sexually transmitted diseases, factors that affect risk of infertility such as diseases and numbers of sexual partners, use of drugs during pregnancy, and information to help determine the demand for adoption. Data from NSFG are expected to be available in late 1989.

The 1988 National Maternal and Infant Health Survey (NMIHS) brought together for the first time the equivalent of a combined survey of national natality, fetal mortality, and infant mortality. NMIHS expands upon information available from vital records through questionnaires sent to mothers and their medical care providers.

The 1988 survey sample included 20,000 vital records—10,000 birth certificates, 6,000 infant death certificates, and 4,000 reports of fetal death at 28 weeks or longer gestation. Most States allowed the surveyers to seek information from unmarried mothers. Provisional data will be produced in 1989 from the first group of 1988 mother-respondents.

The redesigned National Hospital Discharge Survey went into the field in January 1988; data will be available in late 1989. The survey is the first component of the new National Health Care Survey-an expanded survey of health care providers that includes information on alternative health care settings, such as hospices, home health agencies, free-standing surgical centers, and hospital emergency rooms and outpatient clinics. All components of the National Health Care Survey have design links to the National Health Interview Survey. The National Health Care Survey will be fully implemented by 1993, with data collection conducted annually in each health care setting.

In the fall of 1988, NCHS fielded the third National Health and Nutrition Examination Survey (NHANES III)—the seventh and largest examination survey conducted by NCHS. This 6-year survey will call on 40,000 respondents in 88 locations across the country to assess the health and nutritional status of adults and children in the United States. Dietary recalls, physical examinations, laboratory tests, and related procedures will be conducted through household interviews and the use of mobile examination centers.

Like previous health examination surveys, NHANES III is investigating the prevalence of such chronic conditions as heart disease and diabetes. Four areas will receive special emphasis in NHANES III—child health, health of older Americans, occupational health, and environmental health. NHANES III has no upper age limit, and in order to produce reliable statistics for blacks and Mexican-Americans, these groups will be oversampled in the survey.

Current plans call for the release of data after the first 3-year phase of the survey. At that time it is expected that data on the general population will be available either in the form of public use data tapes or published reports.

The National Health Interview Survey (NHIS) is NCHS's annual household survey on basic health and demographic characteristics. The core of the survey focuses on such topics as chronic and acute conditions; illness, injury, and associated disability; and visits made to the doctor, dentist, or hospital. Data on family income and composition, and on personal characteristics, such as age, race, sex, and educational level, are obtained and related to data on health characteristics and health behavior.

Special topics are introduced into NHIS each year. The 1988 special topics were child health, alcohol use, medical device implants, occupational health, smoking, and AIDS. Data from the 1988 NHIS will be available in the fall of 1989.

Planning and development took place during 1988 for a 2-year project to collect national data on HIV infection, called the National Household Seroprevalence Survey. The first year of the project will have a pilot test and one or more pretests to determine whether a full-scale national survey is feasible. If it is feasible, the national survey will be fielded the second year.

Automation. NCHS made extensive use of automation both in data collection and data dissemination in 1988. For instance, data from the 1988 questionnaire on AIDS knowledge and attitudes were gathered with the use of a computer-assisted personal interview (CAPI)—the first time portable computers had been used in a major national population survey.

For the second time, the National Nursing Home Followup Survey successfully used a computer-assisted telephone interview (CATI). CATI proved especially appropriate for longitudinal studies; it easily used information collected during a previous study to automatically set questionnaire skip patterns and obtain higher quality data.

In NHANES III, a minicomputerbased local area network is being used to collect and record data in the mobile examination centers and to maintain interview administrative files and sample person accounting in field offices.

Automation brought about new ways of making data available to users in 1988. Besides the availability of public use data tapes, the 1986 National Hospital Discharge Survey data are now available to users on computer diskette. NCHS is investigating other storage options for data, including optical laser disks and CD-ROM storage.

Cognitive laboratory. In 1988 the Questionnaire Design Research Laboratory (QDRL), part of the NCHS National Laboratory for Collaborative Research in Cognition and Survey Measurement, recruited more than 100 volunteers to test the National Health Interview Survey's 1989 special topics on diabetes, dental care, orofacial pain, digestive diseases, and mental illness.

QDRL also conducted focus groups to explore the concerns of elderly respondents with regard to participating in the NHANES III physical examination and the attitudes of respondents toward participating in the National Household Seroprevalence Survey. In addition, QDRL began a series of experiments on the cognitive aspects of responding to sensitive survey topics.

International activities. NCHS participated in the successful International Collaborative Effort on Perinatal and Infant Mortality. Under an international collaborative effort, known as an ICE, several nations may carry out collaborative, comparative research of mutual interest and benefit. Volume 1 from the ICE on Perinatal and Infant Mortality was published in 1985 and contained proceedings of an international symposium. In 1988 NCHS published volume 2 from special sessions of the ICE. including analyses related to birthweight-specific mortality and development of cause-of-infant-death categories to be used in analytical research. NCHS is now participating in bringing together data from different countries and planning a major symposium for 1989. In a new ICE on Aging, NCHS is collaborating in international research with several other nations on the health and wellness of older people. Topics for the ICE on Aging include morbidity, mortality, functioning, and outcomes of care. NCHS took part in an international symposium on measurement issues for the ICE on Aging on December 7–9, 1988, at the National Institutes of Health.

Health objectives. NCHS is active in setting and tracking the official Health Objectives for the Nation. The 1985 health promotion special topic of the National Health Interview Survey will be repeated in 1990 to provide endpoint measures of the country's progress toward the 1990 Objectives for the Nation.

The Year 2000 Objectives for the Nation are being developed and will continue to emphasize preventing disease and trauma as well as promoting good health. NCHS is offering statistical assistance in the formulation of these health objectives, and will have lead agency responsibility in reviewing the objectives for the priority area of Surveillance and Data Systems.

NCHS continues in its role of tracking progress toward the objectives. The NHIS special topic on health promotion will be modified in 1991 to provide early baseline measures for the new Year 2000 Objectives. The Prevention Profile will be published as a tracking document every 3 years as part of the "Health, United States" series.

NCHS activities in data collection, analysis, and dissemination in 1989 promise to continue the many initiatives in health statistics begun and furthered in 1988.

—FARRELL WOLFSON, Technical Publications Writer, Office of Data Processing and Services